THE INTERNATIONAL JOURNAL OF HUMANITIES & SOCIAL STUDIES

Computer-Mediated English Language Pronunciation Learning in Nigerian Classroom Setting

Olufunmilayo Lara Olofin
Senior Lecturer, Department of General Studies, Osun State Polytechnic, Nigeria

Abstract
This paper examined and analyzed pupils' proficiency in oral English with or without exposure to computer. It investigated the ways pronunciation deficiency can be resolved through Computer Assisted Language Learning (CALL). Finally, it determined the influence of computer-mediated learning on the subjects' proficiency in oral English. The paper aimed at exploring possible solutions to pronunciation deficiency of users of English as a second Language (ESL) in Nigeria. The study sample included JSII and SSII classes in a selected Local Government in Osun State. They were divided into two groups of 20 Experimental and 20 Controlled. Questionnaires were given to elicit information on their level of computer knowledge and exposure to English. A pre-test was conducted to test the subjects' level of pronunciation knowledge before the experiment was carried out. After six weeks of teaching the Experimental Group (EG) with computer- mediated learning method, and the Control Group (CG) using the traditional method, a post test was administered. The second comparison was between the Experimental and Controlled groups in the post-test. Analysis of Variance (ANOVA) was used to analyze the data and the underlying theory was Warshauer and Healey (1998). The result shows disparity in performances of the two groups.

Keywords: *Computer mediated learning, computer assisted language learning, Nigeria, phonological proficiency, experimental, controlled, ANOVA.*

1. Introduction

The role of the English language worldwide today cannot be over-emphasized. As a global language, it no longer belongs to the United Kingdom or the United Statesalone. Since Nigeria gained independence from the colonialistsin1960,English language has become a major tool for development. Today, in the face of globalization, and the rapid expansion of information technologies,an explosive demand for the English language learning worldwide becomes a drive.

Nigeria as a developing country even with the strive to grow the indigenous languages cannot afford to do away with the English language for economic, political, social, educational, and above all, science and technological development. It serves as a unifying language for the three major Nigerian languages plus about five hundred and twenty-seven (527) minor ones with their numerous dialects, (Lewis, 2009; Egbe, 2014: 153; Balogun, 2018).Knowledge of the English language comprises reading, writing, listening and speaking skills. Studies such as Atoye, (1997);Faleye, (2004); Hismanoglu, (2006), Idoli and Ummanah, (2010) have however revealed that oral aspects of the English Language are neglected in some primary and secondary schools owing to factors such as: poor background of the learner, psychological behaviour of the learner, lack of interest, sociological behaviour of the learner, lack of materials, inadequate facilities and inadequacies of the teacher, and as a result of these problems, unintelligible pronunciation of the English language capable of misunderstanding sometimes emanates from learners of the language, (Soneye, and Faleye, 2015; Olofin, 2017).

The English language came into existence in Nigeria as a colonial legacy. Nigeria belongs to the outer circle in the ownership of English language as one of the countries in the world where English is espoused for both national and international activities. It is the language of the elites which makes its proficient users to be in the minority. Its function as language of unification has given it a precedence over the local languages. The multilingual nature of Nigeria has given rise to a variety known as Nigerian Pronunciation (NP), a feature of Nigerian English, as the case is in other places of the world such as Malawi, (Kayambazintu, 2000); Spain, (Piccinini & Arvaniti (2015); Taiwan, (Chen, 2014) and Korea (Samimi, 2017) (to mention just a few) where English is used in conjunction with local languages.

The NP variety of English is seen to satisfy nearly 80% of its speakers' domestic needs (Crystal, 2000) and various scholars have argued in support of the Nigerian pronunciation as a dialect Nigerians are comfortable with (Adekunle, 1996, Afolayan, 1989, Jubril, 1982 and Onuigbo, 1986). This argument is based on the notion that the Received Pronunciation (RP) or British Broadcasting Corporation) BBC pronunciation makes the Nigerian speakers sound native which may be unnecessary in Nigerian context communication. However, intelligibility cannot be underestimated in the face of global development. Keeping the accent of English spoken all over the world cannot be over emphasized. Failure to do so would defeat one of the major advantages of acquiring an additional language necessary for reaching a wider

audience. Core intelligibility features should be identified and focused upon so that the various accents remain mutually intelligible, (Ufomata, 2009).

Computer Assisted Language Learning (CALL) is seen as 'the search for and the study of applications of computer in language teaching and learning' (Levy, 1997:1). It is a development on CALI (Computer Assisted Language Instruction) found inadequate being a teacher-centered approach. Learning is expected to be learner-centered and therefore needs a learner-centered approach. CALL encompasses a wide range of ICT applications and approaches to teaching and learning foreign language manifesting in the use of recent applications such as virtual learning environment, web-based distance learning, corpora and concordances, interactive whiteboards, computer-mediated communication (CMC), language learning in virtual worlds and mobile assisted language learning, (MALL) (Davies et al, 2011).

There has not been sufficient study on how computer assisted language learning can be used to improve pronunciation proficiency among users of the English Language as a second language in Nigeria, hence this research. The study which is not a departure from the solicit for intelligibility against emphasis on native-like pronunciation, will add to the existing works on solutions to problem of low proficiency in oral English. It is also expected to draw the attention of speakers of English as a second language to the relevance of CALL in the acquisition of phonological proficiency.

2. Literature Review

2.1. Theoretical Framework

Computer Assisted Learning theories have not been a departure from language learning theories. Based on Warshauer and Healey (1998), there are 3 identifiable stages by which computer can be used in language teaching. These are Behaviouristic CALL (1970-1980s) which has its root in behaviouristic learning. It is a development on the structuralistic approachwhich opines that what a child learns depends on what influences him/her and the effect the entire external factors have on such individual. Despite the numerous criticisms against this approach, it is still adopted in most schools today. The computer at this stage was Mainframe while the teaching paradigm was Grammar-translation. The Audiolingual language was viewed as structural and the computer then was used for drills and practices while the objective was just accuracy.

Communicative CALL (1980s-1990s) was a development on Behaviouristic CALL. It believes that competence is achieved through interaction; a shift from rule learning to functional language. The technology here was PCs and the teaching paradigm was communicative language. Computer then was used for communicative exercises and the target goals were accuracy plus fluency.

The third stage was Integrative CALL (21st Century) which sees language acquisition as a socio-cultural activity where language learner is engaged in authentic contexts. According to the Russian Psychologist, Vygostky, our mind relies on tools and artifacts which today's personal computer provides opportunity for to access information, communicate and create multi-modal presentations consisting of texts, pictures, sounds and video. The technology here is multimedia and internet and the teaching paradigm is context-based, English for Specific Purposes (ESP) and English for Academic Purposes (EAP). Language here is seen as socio-cognitive and the principal role of computer is for authentic discourse while the objective is accuracy plus fluency plus agency. In integrative approach, students learn to use a variety of technological tools as an on-going process of language learning and use, rather than visiting the computer laboratory once in a blue moon for isolated exercises (Warshauer & Healey, 1998). This current study is tailored towards Integrative approach.

With regards to the roles of the English language in Nigeria, researchers have undertakenstudies on the various problems encountered in teaching and learning of the language. Phonology as an integral part of the English language is not without its own peculiar problems. Bamgbose (1971), Adetugbo (1984), Afolayan (1999), among others, trace the problem of low proficiency in pronunciation to mother tongue interference. In Nigeria, a multilingual country, an average Nigerian is known to be bilingual, as a result, ESL users of English experience L1 transfer; one of the factors that led to varieties of English, hence, making Nigerian English one of the World Englishes.Onuigbo, (1984), observes that in first language learning, the learner is highly motivated and is surrounded by a favourable linguistic environment, the kind that the second language user lacks. From this we can deduce that though language learning generally has some problems, second language learning has a greater problem. To him, inadequate linguistic environment constitutes a threat to proficiencyin ESL, a problem for ESL learners.

Low proficiency in English is also traceable to grapho-phonological or sound-spelling discrepancies among others, (Dunstan1969and Soneye, 2007). Scholars like: Onuiogbo (1984), Olagoke (1984),Obanya (1977), Ayodele (1981) Olasehinde (2002) and Okeke, (2011) examine error analysis which is seen to be the result of L1 transfer. Current studies have however discovered that L1 transfer at times may not be negative transfer, in the sense that there are some transfers that may enhance L2 proficiency, (Olofin, 2017). Markedness is another major factor militating against pronunciation proficiency of L2 learners, (Davidson, 2011; Olofin, 2017). Where items in L2 are more marked than L1 there may be pronunciation challenge. These scholars did not only identify the problems that led to low proficiency, but also suggest possible solutions to the identified problems. Failure in English language is partly a result of low pronunciation proficiency since sound is the bedrock of any language. This study, however, is an extension of the existing studies in proffering solutions to unintelligible pronunciation of English language in Nigeria.

The role of computer in the world today cannot be over-emphasized. People in advanced countries have benefited a lot from computer to enhance their knowledge. Both teachers and pupils use computer as a daily activity, but studies have shown that computers are less used in teaching in most secondary schools, (Olofin, 2008 and Fakeye, 2010). Nigeria,

though, still a developing country, is not left out in following the trend in the use of computer. A lot of people who can afford it get one in their offices to boost their knowledge. The governments at the federal, state and even local government levels provide some of their workers with computer to work with. However, it seems most of these computers are under used. Apart from that, most students in this 21st century visit the internet, a factor which has attracted them to be christened the *Net generation children*, but with a mission quite far from academic.They lack the awareness of the advantages they stand to derive from the internet to boost their linguistic competence generally. Though we are in the technological age, the percentage of teachers using computer to enhance teaching is very low, (Fakeye, 2010).

The issue is, the use of computer to improve teaching and learning of the English language in Nigeria in most classroom set up, specifically to enhance proficiency in pronunciation,is yet to be fully experimented. And no doubt, this is an area where we are faced with much difficulty in this part of the world. There has not been sufficient study on how computer assisted language learning can be used to improve pronunciation proficiency among users of the English Language as a second language in Nigeria.

Olofin, (2008) examines the use of CALL in teaching English language in Secondary schools in Nigeria. It was a theoretical examination of how computer could be used in enhancing English language learning generally. Olibie (2010) carries out a study on how computer could possibly improve students' achievement of English grammar. Her findings reveal that CALL had an overall positive effect on students' achievements in English instruction in Universal Basic Education (UBE). This study cannot be used to determine performance in pronunciation. Another related study is Fakeye, (2010) which evaluates the use of computer in the teaching and learning of English language in private Junior secondary schools. The study is just a general evaluation in which questionnaires were administered to elicit information from the students and teachers. These lapses in the above examined studies inform this current study. The study will add to the existing works on solutions to problem of low proficiency in oral English. It is also expected to draw the attention of speakers of English as a second language to the relevance of CALL to the acquisition of phonological proficiency specifically employing a practical approach.

It is worthy of note that this study does not tend towards making L2 learners sound native speaker but to ensure intelligibility among the users of English language. Moreover, English language still remains a prerequisite to mobility into the next level of education in Nigeria in which pronunciation is still part of the assessment and the syllabus still remains British English standard. Therefore, uniformity in sound realization becomes essential.

3. Methodology

For the purpose of this study, the population was made up of forty L2 learners of English language chosen from four(4) different secondary schools out of seventeen (17) in a local government in Osun State. The local government is not completely rural but the four public schools were purposively chosen based on the fact that they are located in rural areas of the local government where the L2 learners might havepronunciation proficiency problems. Ten students were selected from each of these schools. Both JSSII and SSII classes constituted the subjects of the study. In each school, five of thembelong to the experimental group while the other five was controlled. Thismade a total number of twenty students for controlled and twenty for experimental. To select our subjects, random sampling was used after dividing them based on sex. As stated earlier, the total number of subjects was forty made up of twenty males and twenty females. Majority of the students were born and bred in the community where their schools were. Their mother tongue is the Yoruba language. A questionnaire was drawn to elicit information from respondents concerning their knowledge of the computer. This was to enable the researcher discover the familiarity or otherwise of the subjects with computer mediated pronunciation learning. Apart from that, both oral and written questions were drawn to test the students' phonological awarenessand their pronunciation were recorded for analysis.

There were two groups: the Experimental (EG) and the Controlled, (CG), henceforth referred to as EG and CG respectively. For EG, the test was divided into two. There was a pre-test meant to test the level of students' phonological awareness before the introduction of computer and a post-test to test their phonological awareness with the aid of the computer. Jones (2003) dictionary sourced lexicon as well as recorded conversations was used to teach those in the EG. The same applied to CG. But in the case of CG, computer was notused at all. The pre-test was meant to test their rate of phonological awareness and the level of proficiency before the researcher taught them with the same traditional method they were used to. The post-test was to assess the difference between students' phonological awareness and proficiency before and after they were taught by the researcher.

4. Data Analysis and Discussion

4.1. Background Information on the Subjects

Background information were elicited from respondents with the aid of questionnaire on sex, age, location, age of exposure to English language, source of exposure to English language and level of accessibility to computer. There were 20 male and 20 female respondents. Information on location reveals that 13(32%) live in the village; 27(67.5) reside in the town while non-resides in the city. The research shows that pupils were exposed to English at various ages. Fifteen (15) of them (37.5%) got exposed to the language between the age 0 and 5 (either through parents or siblings) and 21 (52.5%) began using the language between the ages of 6 and 10, while just 4 (10%) got exposed to it between ages 11 and 15, having their first contact with the language at school. Thirteen (13) (32.5%) claimed they got exposed to English through parents and siblings; 3 (7.5%) through peers; 8 (20%) through mosques and churches and 5 (12.5%) through television/radio.

	Home	School	Parents Office	Friend's House	Cyber cafe	Other Sources
Television System	40	0	0	0	0	0
Audio Tapes	37	0	0	0	1	0
CD	33	0	0	0	1	0
Internet	1	8	3	0	4	0
Email	0	0	3	0	1	0
CD Rom	0	0	3	0	1	0
GSM	6	0	0	0	0	5 (Personal)

Table 1: Analysis of Accessibility to ICT

The above table is the result of enquiry concerning respondents' level of accessibility to computer. It shows where and the type of communication technology they have access to.

4.2. The Adapted Phonological Awareness Test (PAT)

A. Segmental

I. Rhyming Discrimination

Q: Which of the following rhymes with the given word?

(i) Light - (a) late (b) sing (c) rise (d) weight

(ii) Beat – (a) right (b) see (c) the (d) plait

II. Segmentation

Q. Divide these sentences into words, syllables and phonemes.

(i) We saw a roaring animal in the wilderness.

(ii) Put it on the table.

III. Isolation

Q. Identify the phoneme/sound underlined in each of these words: (i) Ph<u>o</u>ne (ii) <u>Or</u>nament

IV. Substitution

Q. Replace the underlined letter with a new one to form a different word. (i) <u>f</u>ame (ii) t<u>e</u>st

V. Deletion

Q. Remove a syllable from the given word such that the remaining part of the word will still be meaningful

(i) below (ii) empower.

VI. Blending

Q. Supply the remaining letters of the given transcription.

(i) /θɪk/ = --ck

(ii) /ðəus/ = --se

(iii) /dəus/ --se

VII. Graphemes

Q. Represent the underlined letters with the appropriate sound each represents.

(i) <u>Ph</u>one (ii) <u>f</u>ool (iii) lau<u>gh</u>

VIII. Decoding

Q. Give the meaning of the syllable which is a prefix in each of these words.

(i) Rewrite (ii) irresponsible

B. The Supra-segmental

I. Stress

Q. Place the primary stress on the appropriate syllable and write the syllable that carries the primary stress in capital letters.

(i) Baby (ii) (remark (V) (iii) information

II. Intonation

Q. Does the sentences below end on rising or falling tone?

(i) Where are you going?

(ii) I don't like it.

The post-test is a replica of the pretest the words only changed. The same tests given to the EG were given to the CG.

4.3. Empirical Analysis of the Pre-Post Tests

For the purpose of this study, we used Analysis of Variance (ANOVA) to test the significance of the independent variable on the dependent variable in the average performance of the students studied. The essence is to detect the variation in the performances of the two groups with the aid of Phonological Awareness Test by Robertson and Salter,

(1997). Seven sub-tests were given to test rhyming discrimination, segmentation, isolation, substitution, deletion, blending and graphemes. The BBC pronunciation was used as a yardstick for phonological awareness and proficiency.

			Expre		Expost	
Variable	**Obs**	**Mean**	**Std. Dev**	**Mean**	**Std. Dev.**	**Gain in Mean score**
Rhm. Disc.	20	0.9	0.71	1.65	0.52	0.75
Segmentation	20	0.75	0.93	2.2	1.82	1.55
Isolation	20	0.2	0.41	0.75	0.79	0.55
Substitution	20	0.8	0.83	1.5	0.82	0.7
Deletion	20	0.15	0.37	1.4	0.82	1.25
Blending	20	0.25	0.44	1	0.79	0.75
Grapheme	20	0.2	0.52	1.3	0.97	1.1
Decoding	20	0.45	0.76	1.15	0.93	0.46
Stress	20	1.5	0.37	2.1	0.64	1.86
Intonation	20	0.1	0.31	0.95	0.89	0.05

Table 2: Results of Anova for Comparison of the Experimental Pretest (Expre) and Posttest (Expost)

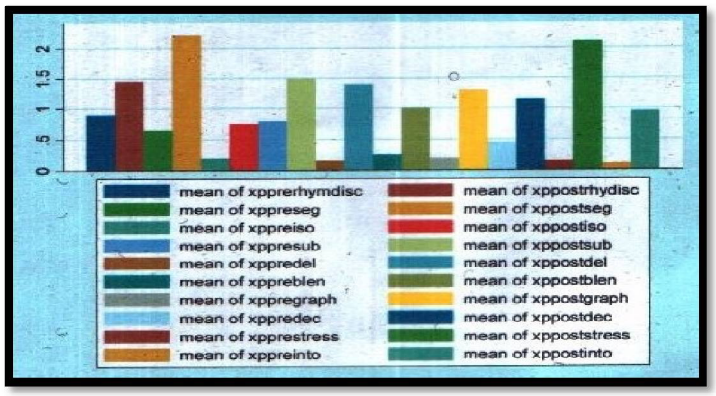

Figure 1: Comparing the Means of Expre and Expost

			Cpre		Cpost	
Variable	Obs	Mean	Std. Dev	Mean	Std Dev	Gain in Score
Rhym Dis	20	0.7	0.73	1.45	0.49	0.75
Seg	20	0.85	1.22	2.75	1.55	0.33
Iso	20	0.1	0.44	0.95	0.83	0.85
Subst	20	0.65	0.93	1.2	0.77	0.65
Del	20	0.15	0.49	1.4	0.88	1.25
Blen	20	0.3	0.57	0.75	0.85	0.48
Graph	20	0.25	0.72	1.2	1.11	0.95
Dec	20	0.25	0.55	1.2	0.83	0.95
Stress	20	0.05	0.22	1.25	0.79	1.2
Int	20	0.05	0.22	1.25	0.79	1.2

Table 3: Results of Anova for the Cotrol Pretest (Cpre) and Posttest (Cpost)

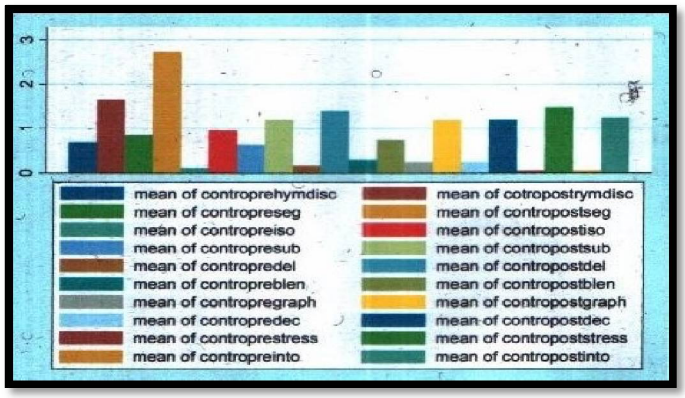

Figure 2: Comparing the Means of Control Pre and Control Post

The above tables are reflections of changes in behavior of the pupils in the area of phonology. The pretest was given at the start of the research while the posttests were administered after a series of teachings spread across a period of six months. The EG were exposed to pronunciation learning via computer-mediated teaching while the CG were taught using the traditional method of teaching. These are the results of ANOVA indicating the differences between the mean scores of the pre-post tests for EG and CG respectively. These results indicate that the pupils at posttest displayed better use of rhyming discrimination, segmentation, isolation, deletion, substitution, blending, grapheme, stress and intonation at various degrees; a reflection of the great impact of computer-mediated learning on the pronunciation proficiency of the students.

	Cpost			Expost		
Variable	**Obs**	**Mean**	**Std. Dev**	**Mean**	**Std. Dev.**	**Gain in Mean**
Rhym. Disc.	20	1.45	0.49	1.65	0.52	0.20
Seg	20	2.75	1.55	2.2	1.82	-0.55
Iso	20	0.95	0.83	0.75	0.79	0.20
Subst	20	1.2	0.77	1.5	0.82	0.05
Del	20	1.4	0.88	1.4	0.82	0
Blen	20	0.75	0.85	1	0.79	0.25
Graph	20	1.2	1.11	1.3	0.97	0.1
Deco	20	1.2	0.83	1.15	0.93	0.05
Str	20	1.5	0.95	2.1	0.64	0.6
Into	20	1.25	0.79	0.95	0.89	-0.3

Table 4: Results of the Anova for Control Posttest (Cpost) and Experimental Posttest (Expost)

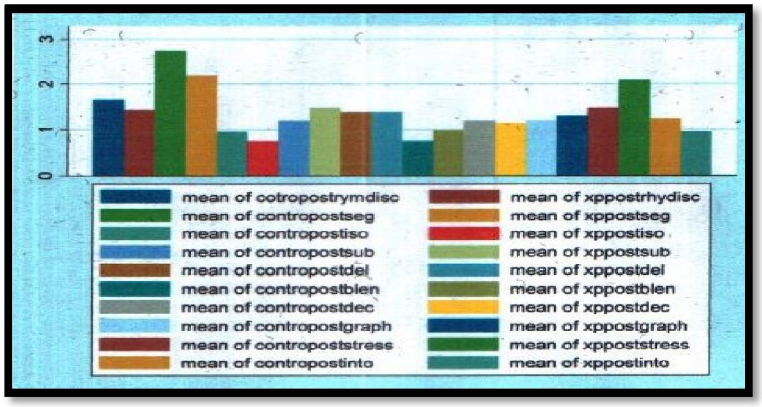

Figure 3: Comparing the Mean of Cpost and Expost

The above table shows at a glance comparison between EG and CG to detect influence or otherwise of the computer mediated teaching on the performance of the pupils. From the ANOVA tests run on the PAT data, the results reveal that there are differences in performance of those in EG over the CG except in the case of decoding and intonation where the mean score in EG is greater than that of CG; and in deletion where there was equal performance. This is traceable to the fact that the CDROM used for teaching did not contain sufficient instruction on decoding and intonation.

From all indications, the majority of the pupils were computer illiterate, an evidence that they were unfamiliar with the use of computer for pronunciation teaching. One of the benefits of CALL is individual learning. If they were computer literate, there was tendency for them to make use of computer for pronunciation learning but they were not and this makes the integration of computer in the classroom setting an alternative. The result of this research therefore shows that computer-mediated teaching and learning is advantageous to pupils.

In addition to that, the result buttresses the submissions that computers are expedient these days for the study of oral, listening and speaking skills, (Olofin, 2008; Olibie, 2010; Fakeye, 2010, Gilakjani, 2018). The experimental group had the benefit of integrative learning of the four skills at the same time. They were opened to the opportunity of seeing the text, listening to the sounds in expressions and conversations, and at the same time, speaking with the aid of the computer speech recognition and immediately listening to their own voice and discovering where fault lies with a view to correcting it immediately.

Results show that those with early exposure to the language performed better than those exposed to it at the lapse of the critical period (Penfield & Roberts, 1959). However, maturity and cognitive development was displayed in the performance of those in SSII over the JSSIII based on the length of years of exposure. This shows that if those in JSSIII had opportunities right from primary school, there was tendency for them to perform better than they did. The Phonological

Awareness Test adopted went a long way in testing the pupils' oral production of sounds in expressions. The improvement recorded in most of the subtests for EG and CG in the posttest is an indication that if CALL is judiciously employed by teachers, it will enhance pupils' pronunciation proficiency.

5. Conclusion

From the above analysis, it is apparent that the proficiency level of pupils in pronunciation was very low at pretest and which was improved upon at the posttest. This shows that that aspect was either neglected by teachers or not correctly imparted, (Hismanoglu, (2006) Another reason might be the background of the pupils since most of them live in rural areas. A motivation might be a contributive factor to the low proficiency before the test was conducted on them. Apart from that, their age of exposure to the language (Ellis, 1985; Faleye, 2004; Penfield & Roberts, 1959) is a critical factor that might lead to low proficiency. If we look at the performances therefore, we will see that averagely, the performance in the EG is higher than that of CG, an indication that CALL played a significant role on the performance of the pupils. The difference in the performances in stress is the highest and this is not unconnected with the numerous exercises available on the computer for testing syllable distribution and stress.

Apart from that, their age of exposure to the language (Ellis, 1985); Faleye, 2004) is a crucial factor that might have affected their proficiency level. If we look at the performance, therefore, we will see that averagely, the performance in the EG is higher than that of CG which is an indication that CALL played a significant role on the performance of pupils. The difference in the performances in stress is the highest and this is not unconnected with the numerous exercises available on the computer for testing syllable distribution and stress.

Generally speaking, the use of computer for the experimental group gave them access to various exercises and also boosted their level of self-confidence and motivation., since no one needed to correct them. When an error was committed, the computer would give them the correct answer. Also, the speech recognition exercise went a long way in instructing the group. This therefore shows that integrative approach to pronunciation teaching contributed immensely to the better performance of EG than the CG, (Warshaeur and Healey, 1998; Bax, 2003).

However, the few places (intonation and decoding), where there was a higher performance by CG than the EG provides an answer to one of our research questions, 'Is computer replacing the teacher's role?'. This is in line with Warshauer, (1996:6) who comments on the crucial issue of the extent to which computer is taking over the teacher's role. He sees computer as playing an intelligent role. He also claims that a computer programme should be able to understand a speaker's input and evaluate it not just for correctness but for appropriateness. It should be able to diagnose a student's problem with pronunciation, syntax or usage and then intelligently decide among a range of options (e.g. repeating, paraphrasing, slowing down, correcting or directing the student to background explanation. There is no doubt that computer cannot satisfy all these conditions. It can therefore be deduced that the role of the teacher is inevitable. Computer cannot replace the teacher in a classroom setting, it can only be used as a tool for enhancing teaching and learning, (Olofin, 2012:92; Gilakjani, (2018).

6. References

i. Adetugbo, A. (1984). The English Language in Nigerian Experience, Inaugural Lecture series, Lagos: University Press.
ii. Afolayan, A. (1968). "The Linguistic Problem of Yoruba Learners and Users of English", Unpublished Ph.D Thesis, University of London.
iii. Atoye, R. O. (1997). "The Case for RP as the Appropriate model for Teaching Pronunciation", Ife Studies in English language. Vol.1&2 (pp. 63-69).
iv. Ayodele, S. O. (1981). "An Evaluation of the Level of Oral English Performance of Grade Two Teacher Trainees", An Unpublished Ph. D Dissertation, University of Ibadan.
v. Balogun, S. 2018 online https://www.lengit.ng).
vi. Bamgbose, A. (1971). Towards a Definition of Standard Nigerian English. Annates d'Universite d'Abidjan.
vii. Bax, (2003). CALL – Past, Present and Future. www.corpus 34u.org/forum/upload/forum.Accessed; Jan, 2011.
viii. Davidson, L. (2011). "Phonetic and Phonological Factors in the Second Language Production of Phonemes and Phonotactics" In Language and Linguistics Compass: Blackwell 5/3: (126-139)
ix. Dunstan, E. (ed) (1969). Twelve Nigerian Languages. A Handbook on their Sound System for Teachers of English, Longman: Green & Co. Ltd.
x. Fakeye, D. O. (2010) 'Evaluation of the Use of Computer in the Teaching and learning of English Language in Private Junior Secondary Schools in Ibadan Metropolis'. Humanity and Social Sciences Journal 5(1), 43- 49.
xi. Faleye, J. O. (2004). Phonological Problems of Teachers of English in Selected Primary Schools in Ibadan and Its Environs. Unpublished M. A. Thesis, Obafemi Awolowo University.
xii. Gilakjani, A. P. (2018). Teaching Pronunciation of English with Computer Technology: A Qualitative Study. International Journal of Research in English Education (IJREE) 3(2), 94-114.
xiii. Hişgmanoğlu, M. (2006). "Current Perspectives on Pronunciation Learning and teaching in Journal of Language and Linguistic Studies. Vol. 2(1). http.//www.2nkfust.edu.tw(emchen/home) (Retrieved June, 2009).
xiv. Idoli and Ummanah, (2011). The Comparative Disparity in Oral English Amongst Students of Urban and Rural Areas in Rivers State Secondary Schools. Global Journal of Educational Research. Vol. 10 (1), 21-27.

xv. Kayambazinthu, E. L. (2000). Sociolinguistic Theories: Some Implications from Malawian Data. *J. Humanit. (Zomba)*, 14, 9-46.

xvi. Lewis, (2007). 'Identity, Institutions and Democracy in Nigeria.' *Afrobarometer Working Paper,*68

xvii. Olagoke, D. O. (1984). Contrastive Linguistic Error Analysis, Interlanguage and the Teacher of ESL. An Unpublished Paper.

xviii. Olasehinde, M. O. (2002). "Error Analysis and Remedial Pedagogy". In Babatunde S. T. and Adeyanju, (Eds), Language, Meaning and Society, Ilorin: Haytee.

xix. Olibie, E. I. ((2010). 'Using Computer-Assisted Language Learning to Improve Students' English Language Achievement in Universal Basic Education', *International Journal of Education Research and Technology*, Vol (1) 66-71.

xx. Olofin, O. L. (2008). "Computer Assisted Language Learning in Teaching and Learning of English in Secondary Schools in Nigeria" OSPOLY Journal of Language and Communication. Vol. 1 (22-29).

xxi. Olofin, O. L. (2012). "Phonological Sensitivity to Computer Assisted Language Learning" An M. A. Thesis, Obafemi Awolowo University, Ile –Ife.

xxii. Olofin, (2017). A Descriptive Analysis of Consonant Cluster Production of English Words by Selected Undergraduate Yoruba/English Bilinguals. International Journal of English Language, Literature and Translation Studies (IJELR), 4(3), 240-250.

xxiii. Obanya, P. A. (1977). "Assessing English Language Achievement Economically", English Language Teaching Journal, 31(4).

xxiv. Onuigbo, M. S. (1984). "Some Phonological Problems of the Educated Igbo Users of English. An Unpublished M. A. Thesis, University of Ibadan.

xxv. Penfield, W. & Roberts, L. (1959). Speech and Brain Mechanism. Princeton: Princeton University Press.

xxvi. Piccinini, P. & Arvaniti, A. (2015). Voice Onset Time in Spanish-English Spontaneous Code-Switching. *Journal of Phonetics*. 52,121-137.

xxvii. Chen, S. C. (2010). "Multilingualism in Taiwan". *International Journal of the Sociology of Language.* 205, 79-104.

xxviii. Samimi, S. (2017). Korean-English Code-Switching Explained by Double Switch Constraint Explains WH in-Situ. *Generative Grammar in Geneva*, 10, 153-164.

xxix. Soneye, T. (2007). 'Phonological Sensitivity of Selected Newscasters to Sound-Spelling Discrepancy in English and its Implication for Oral English Teaching in Nigeria'. *Marang: A Journal of English and literature Vol. 17:30-42.*

xxx. Soneye, T. and Faleye, F. J. (2015). 'Syllable Phonotactics in Educated Nigerian Spoken English'.*Konin LanguageStudies*, KSJ 3 (3) 255-269.

xxxi. Warshauer, M. & Healey, B. (1998). 'Computers and Language Learning: An Overview', Language Teaching, 57-71.